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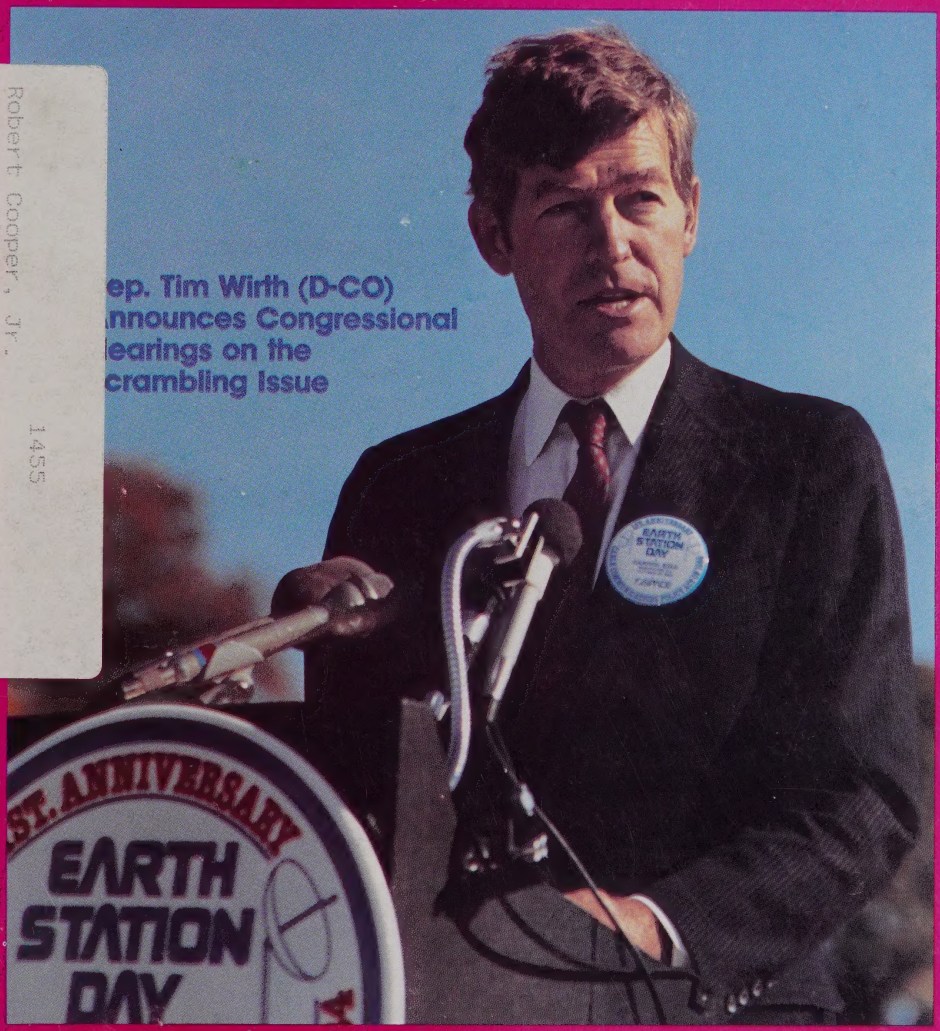
S P A C E

# SATVISION

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# The Goals of SPACE

SATVISION is the monthly publication of the Satellite Television Industry Association, Inc. (SPACE). SPACE is an association of owners, distributors, dealers and manufacturers of satellite earth station equipment, as well as those engaged in the private cable business.

SPACE's successes have been the result of careful planning and execution of specific goals which have resulted in the clarified legality of receive-only home satellite earth stations. These goals were affirmed and new ones were established at the Board of Directors meeting in Nashville, Tennessee, September 1985.

First, the satellite earth station consumer should have a right of access to all scrambled signals.

Second, programmers generally should be paid for their efforts, either through advertising, through subscription, through pay-per-view or some yet-to-be-conceived payment plan.

Third, the satellite earth station consumer should pay reasonable prices. This must come about either through a) a competitive, free enterprise distribution system not controlled exclusively by programmers or cable operators or by, b) legislation including regulation. SPACE supports a level playing field in the area of distribution of scrambled signals to satellite earth station owners both inside and outside of cabled areas. That is, we oppose any distribution scheme that would have the effect of excluding independent, non-cable or non-programmers (distributors), and we oppose exclusive distribution plans through the cable industry or programmer cooperatives.

Fourth, SPACE supports the entrepreneurial spirit of all advertiser-supported services that wish to serve the rapidly expanding earth station market in an unscrambled mode in order to maximize their viewing audiences.

We encourage these services to use their common sense and not succumb to the anticompetitive posture of the cable industry advocates that are attempting to force them to scramble by threatening to drop their services. In summary, they should have freedom by choice.

Fifth, scrambling equipment should be low cost, user friendly and widely available. This includes: a) chip sets and associated electronics should be available to all satellite earth station receiver manufacturers; b) sufficient decoders should be available before encryption commences; and c) encryption should be a flow-through encryption system that will allow viewing screen to be addressed, decoded and billed. This includes every cable, MDS and STV subscriber. Anything short of that is an interim technology and the consumer should not be forced to pay for such an experiment.

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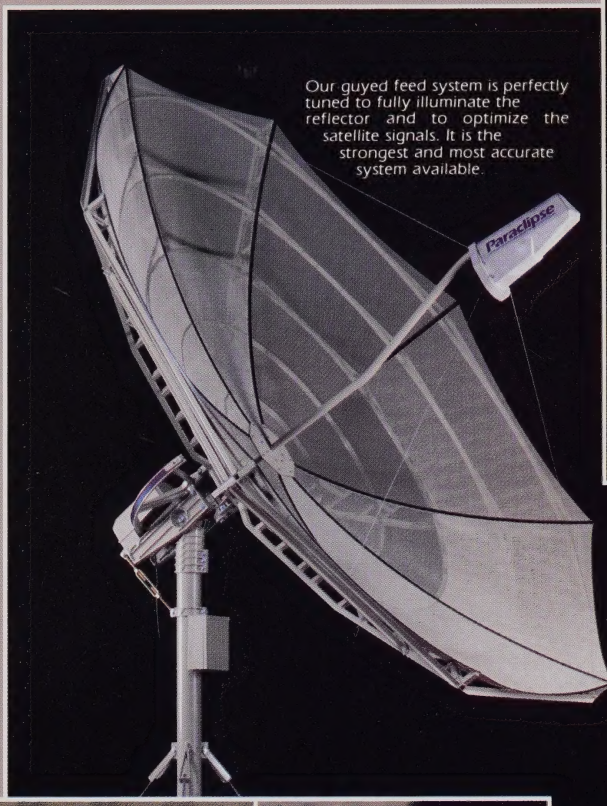
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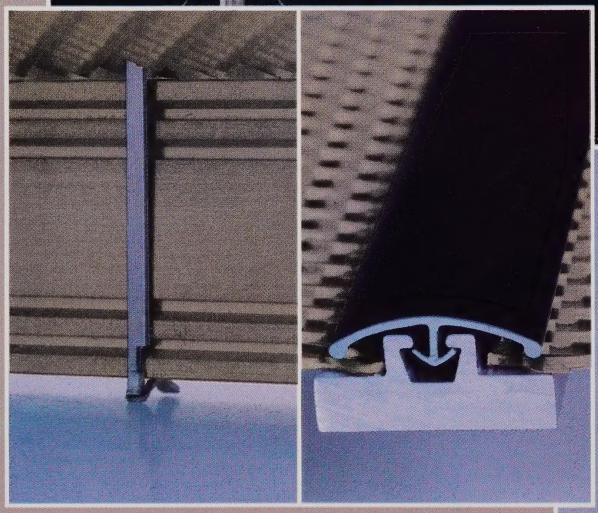

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We need each other now to help ensure that programmers are not coerced by the cable industry to scramble.

From 1980-1983, manufacturers, distributors, dealers and consumers—through SPACE—prevented four bills from passing in Congress that would have made the use of satellite earth stations illegal.

In 1984, SPACE ensured the legality of the use of satellite earth stations through passage of the 1984 Cable Communications Policy Act.

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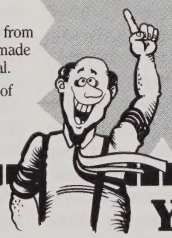

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*Optional:* Please accept $ _____ as a contribution towards the Viewing Rights Fund to support SPACE's activities.

☐ Additionally, I would like to receive a year's subscription to SATVISION, the industry trade association's monthly magazine for $35.00. Please enclose check with coupon.

# Editorial

## The Evolution of Communication Through Pictures

In the beginning a cave man wanted to brag about the dinosaur he had killed, so he turned to the wide screen walls of his cave and drew pictures to impress his neighbors, as well as attract the attention of a woman who had a good recipe for medium rare dino. Throughout time, men and women have been fascinated with showing each other pictures and trying to communicate with friends and relatives near and far. Now friends and relatives cover the earth, and because picture information is also vital to world peace, man wants to communicate faster and better than ever before.

A lot of progress has been made in the evolution of communication since man resorted to picture writing to tell his first story. But there will always exist those people who feel threatened by new technology, and others who just resist change on general principal. Because the first cave pictures were simple and almost universally understood, man began scrambling and encoding messages so that only the elite (those who studied languages, grammar and syntax) would get the full meaning.

The ancient Egyptians became so adept at cuneform, or their own patented type of picture writing, it took scholars thousands of years to uncover the secrets of their civilization. When Guttenberg invented moveable type and printing became inexpensive enough for the working people to buy books, the Monks felt threatened. For centuries they had handwritten the beautiful "illuminated religious scrolls." However, competititon from these print shops brought the price of books down, spread religion and inspired many people to learn to read and write. And, of course, man began reading stories about hunting trips, big game kills, wars and other things that continue to confound religious leaders. Sure enough man's values hadn't changed much since his cave exploits, but the technology was getting better.

Newspapers kept those who could read informed, but ships, horses and foot runners were still the fastest means of getting the word from one writer to another. Telephone and telegraph enabled man to send an encoded signal of his voice or writing over a wire. He even strung cable across the Atlantic Ocean to keep in touch with folks in the old country.

Then man discovered radio waves were capable of sending messages without wires and the distance and speed with which he was able to send his latest thoughts was extended and improved. The newspaper industry, which had originally been using wired communication to wholesale information for printing and retailing messages, felt threatened. The discovery of radio waves heralded the end of written communication.

However, during the radio era, picture magazines flourished and probably reached their peak of influence with **Life Magazine**. Man was still fascinated with pictures, especially of himself hunting, loving and killing. The radio networks invested money in entertainment programming and developed affiliates who could make money by rebroadcasting the network signals to local listeners. Some networks predicted the demise of local radio programming. However, the local stations continued to flourish. Program formats changed and the networks began to use recorded music and local talk show personalities.

After World War II when television became affordable, people were fascinated once more with a fuzzy black and white picture that could only be seen on small square screens by people sitting in semi-darkened rooms. TV network programming was transported by airplanes which delivered 16mm film of pictures photographed off the face of a live TV screen. When weather was bad and planes couldn't get through, local TV stations substituted reruns filled with local studio shows or went black. The network used coaxial cable to link major installations. Those people located close enough to a local broadcast station were happy to receive a picture at all. Later, chains of microwave towers linked local stations to network programming and color was added to the pictures.

Cable TV, which actually linked the local broadcast station to each home in a community through wires extending from antennas which passed along the microwave signal, developed slowly and cautiously. Municipalities reviewed presentations from cable operators who promised not only to pass along the signal from networks, nearby stations, super stations and special TV programming but they also volunteered to provide public access to studio facilities; cover local council meetings, school board hearings and high school sports. Cable TV appeared to be a cornucopia of offerings of entertainment, news, sports, movies, public service and civic communications. However, it was expensive to provide up-to-date movies and live sports coverage not already being offered by the broadcast networks. HBO and ESPN bought movies and sports programming, produced their own programs and covered sports which had never had wide spread popular acceptance. There were those who said cable was providing more television programming than anyone would ever want to watch. They predicted the end of the television broadcasting industry. Instead it flourished.

The Americans got into a race against the Russians to see who could get to the moon first. The Americans set national goals and achieved them.

# Editorial

The astronauts were heros of the day. We thrilled at the idea of man landing on the moon and the fact that we were able to get a great picture of the event as it happened, here on earth.

Then it became clear to the man on the street that this was not just a race for the moon. National leaders knew that although a trip to the moon was important from a political point of view it was not an ultimate goal. Also, it was realized that the rockets that could put a man on the moon could also do what the English science fiction writer Arthur C. Clarke had predicted in his literature in 1945; they could park a satellite in geosynchronous orbit to become a world communications relay station 22,300 miles in space.

This technological breakthrough was an investment in communications that would become a boone to Americans entering the "information age", in which communications, data processing and management would be the key to the future. There was now a national resource available capable of informing and educating people who lived in the country and providing them with access to information and entertainment from around the world. For the first time international picture writing was affordable to those who valued video literature and were willing to invest in a satellite home earth station, in order to receive the signals which the United States government had spent billions to subsidize, utilize and promote.

Again there were those who resisted this new technology. Those who had invested in the older cable technology attempted to cloud the issues and impune their ethics on those who bought earth stations. Individuals who spent $3,000-$5,000 for a home receiver station to gather world-wide signals from more than 100 channels of programming were smeared as 'pirates' and accused of stealing from pay-TV programmers.

Municipalities which were encouraged to protect and nurture the development of cable franchises in earlier years were being urged to exclude satellite TV dealers from free competition on the open market, because direct-to-home technology could give this industry an advantage over the existing technologies. The unique characteristics of satellite home communication differentiates this industry from existing technologies.

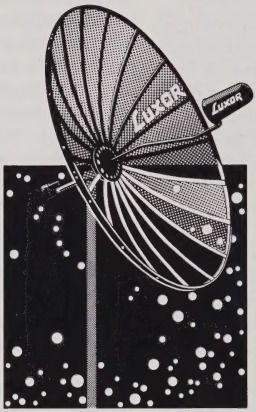
There is room for cable TV and home satellite antennas and history reminds us that each new technology has made a unique contribution to data and visual communication, but never has it eliminated the previous technology. Ask the Monks and Calligraphers who still practice an age-old art form. Ask the kids who boast in graffiti on city walls similar to the way cave men did on cave walls. Ask a New Yorker which type of communication should be restricted; graffiti or satellite antennas which have the greatest potential to bring him world-wide entertainment. Satellite earth stations already bring more news and information to Sri Lanka located in the middle of the Indian Ocean, than the New Yorker, located in the information capital of the world has available to him through broadcast or cable.

The future of satellite home earth stations is difficult to imagine. The real menu of more than 100 channels available to the average antenna owner is more programming than a person can comprehend, but it should not be passed off as a plethora of sitcoms and shoot'em ups. When people tell you that they don't watch television because it panders to low levels of understanding and poor taste, they are falling into the trap of those who believe you go to a library to read from the front door to the back. Intelligent people don't complain about the quality of writing to be found in a library. They don't go to small libraries because they know that in larger libraries there are too many copies of "Gone with the Wind" for them to read each one. They seek the largest storehouse of material because they have learned how to use the library system. They can find what they want, read it, or reproduce the information they need for later reference. They go to the largest library not because they want to read all the books but they want a choice. No lessor library will offer them that choice of books or television programming. American should not be forced to limit their use of a national resource just to support an outmoded information source.

Americans have never let an investment in one technology restrict them from the advantage of newer innovations. Less than half of the cable operators carry the proceedings of Congress on CSPAN, because they don't provide enough available channels to allow viewers the choice to watch live legislative sessions or committee hearings from Washington, D.C. However, satellite antenna systems can offer the choice of vital civic educational programming on the national or international level. By the same token cable can wire city halls and offer live telecasts of council meetings and school board meetings or neighborhood high school sports on a reduced scale that doesn't justify satellite transmission. These two technologies have complimentary features which will allow them to coexist in an expanding market place. That is proven by the number of home earth station owners who purchase antennas after they already have cable. They added the satellite system because they wanted the diversity of satellite programming.

Let history not record that this was an era of satellite antenna burning in which one television transmission technology wasted another technology, just because they were afraid of competition.

# Tired of putting picture quality, choice, or no TV




*Luxor offers a complete system from antenna to receiver. It's the state of the art in satellite TV.*

## Go for the satellites!

### Get every show in the sky—movies, sports, news, stereo and more—with a LUXOR Satellite TV System.

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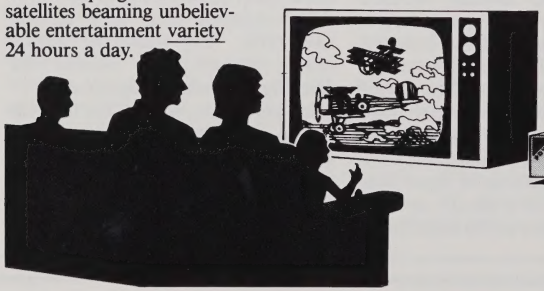
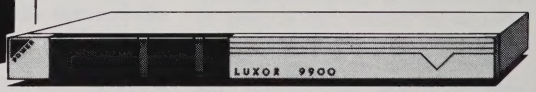
A Luxor system delivers picture quality that beats the best available on cable—because you receive it directly from a satellite overhead. (The signal is broadcast straight to you; it does not lose clarity by having to travel over miles of cable.)

An investment in satellite TV equipment will bring you rich rewards in viewing pleasure for many years to come. And a Luxor system is within the reach of most families.



**THE INTELLIGENT SATELLITE TV SYSTEM.**




*Luxor's affordable, new 9900 satellite receiver is pre-programmed at the factory to remember more channels than any other receiver. Just push a button. You automatically pick up any picture in the sky. Luxor has wireless remote control, plus digital display to identify the satellite and channel you're watching. The most advanced satellite receiver!*

# up with poor limited channel at all?

# Cut it out!

**AS LEGAL TO OWN AS YOUR TELEPHONE**

. . . since, by act of Congress, everything on the air is legal to view. Easy to use too! You direct the whole system from your easy chair with a simple hand-held remote control. Just press a button and you aim your antenna. Press another, and select any channel you wish.

Your Luxor system—including "dish" antenna, receiver, and components—is fully guaranteed. It is backed by the service expertise of our national network of hand-picked Luxor dealers and distributors.

**ATTENTION DEALERS:**
**This 2-page advertisement is appearing in a number of mass circulation consumer magazines. The purpose of this ongoing campaign is to bring the benefits of satellite TV to the attention of the public, and to generate business leads for Luxor dealers. For additional information, call 1-800-245-9995.**

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*Luxor North America Corporation*
*P.O. Box 32*
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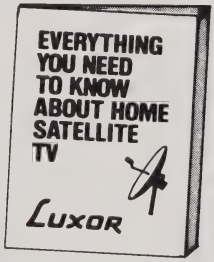


☑ YES, I'd like to receive Luxor's 16 page booklet, "Everything You Need to Know About Home Satellite TV," absolutely free and without any obligation whatsoever.

☐ Also please send name of my nearest Luxor dealer.

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SA-0030

# Legislative Update

## Congress to Hold Hearings on Scrambling

On a shining October day with bright balloons ascending above the Capitol Mall, over one thousand attendees of Satellite Earth Station Day heard Communications Subcommittee Chairman, Tim Wirth, promise that Congress would investigate scrambling issues early next year.

Directing the crowd to go forth and spread the word about earth stations, Congressmen Tauke, Tauzin, Rose, Chappie, and Gregg registered strong support for the industry's goal of serving all Americans. The crowd gathered to celebrate the first anniversary of passage of the Satellite Viewing Rights Amendment which clarified that home viewing of unscrambled signals was legal.

Calling the current situation on scrambling the invasion of the encryptors, Congressman Tauzin had earlier asked Communications Subcommittee Chairman, Timothy Wirth, to hold hearings on the scrambling issue. That request had been echoed by Congressman Thomas Tauke (R-Iowa).

Those calls were responded to by Chairman Wirth this beautiful day. Last year, the Chairman had been a principal architect of the satellite viewing rights compromise clarifying the legality of this industry. Asked to cut the birthday cake in honor of the Bill's first birthday party, the Chairman gave the industry a birthday present, one it richly deserved: hearings on the all important issue of scrambling. Hearings are so critical because many in Congress, including many on the important communications subcommittees, are not yet thoroughly versed on the benefits of the home earth station technologies. Hearings will help focus the debate and provide an opportunity for resolution. While a precise date has not been set for hearings, it is anticipated that they will occur during January or early February 1986, in Washington, D.C.

## The Earth Station Industry Covers Capitol Hill

SPACE members from 46 states visited Washington on October 29th in celebration of the first anniversary of the industry's birthright, given last year by Congress through passage of the satellite viewing rights provisions of the Cable Communications Policy Act. Hundreds of meetings with Congressmen and Senators occurred, with some new co-sponsors already obtained. The entire event was recorded by several fixed studio cameras, as well as three remote feeds located all over the U.S. Capitol and inside the various Congressional buildings. Many thanks to Producer and SPACE Treasurer, Bob Behar and Associate Producer, Hal Hailey and SPACE dealers from Maryland who spent two straight weeks preparing for the uplink. The Board of Directors voted them and the trade press that participated in the interviews, a well-deserved salute.

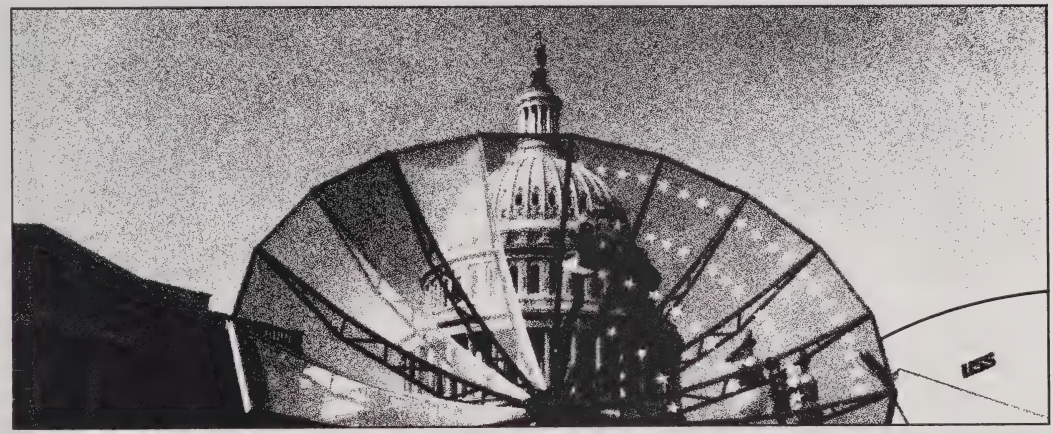
Response from legislators was generally very positive. Jack Johnson who had journeyed all the way from Jamestown, North Dakota, commented that he had three very successful meetings. To be sure, not all legislators were so well versed and sensitive to issues. Texas SPACE Dealer Board member Hoyt Foster reported on at least one meeting he had in which the elected Representative could not understand any need for a home satellite antenna where franchised cable existed. This reaction clearly points out that much more needs to be done. Wayne Morong from Maine, discussed the benefits of satellite technology for rural America with a Senator from his state. The Senator indicated that the cable industry was also busily doing its work with their elected Representatives.

Manufacturers, dealers and distributors were joined by some home earth station owners. Mr. Eugene Cervone and his wife joined us from their home in Brooklyn, New York. Mr. Cervone, who is a member of SPACE, has written extensively to Chairman Wirth on earth station topics. Some of the largest delegations came from Florida and Louisiana. Millie Fontenot of Satellite Earth Stations, with stores in Mamou and Covington, Louisiana, joined a group of over 15, for a meeting with Senator Long. A similar sized group from Kentucky met with the Communications Subcommittee member Wendall Ford.

# President Reagan Salutes the Home Earth Station Industry

Helping to celebrate its first anniversary, the earth station industry was greeted on its arrival in Washington by a letter from President Reagan. The President praised the earth station industry as founded in rural areas and nurtured by the American entrepreneurial spirit.

# Satellite Earth Station Day Uplinked Live



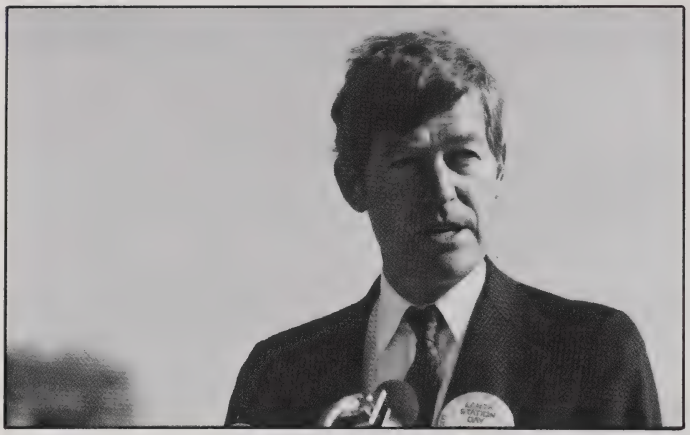
Viewers of Galaxy 3, Transponder 5, were able to watch the events of Satellite Earth Station Day live throughout the United States and Canada. The coverage began at 8:00 a.m. Eastern Standard Time and ran until 11:00 p.m. The coverage included interviews and anecdotes from Congressmen and Senators and nearly the entire earth station industry trade press. The real stars of the show were those who took the time away from their schedules to come to Washington. It was a job well done and an investment in the industry's future which, through the announcement of hearings, is already bearing fruit.

# Election Results

The following is the results of the election for officers for SPACE for the year 1985-1986 and officers for the SPACE Dealer Board.

Chairman of the Board—Taylor Howard, President—Dave Johnson, Secretary—Stan Leaf, Treasurer—Bob Behar, Members of the Executive Committee (in addition to the above officers)—Sandy Wirth, Frank Abruzzo, Mary Lou Heinz. The alternates for the Executive Committee are Ron Wysong and Peter Sutro.

Newly-elected officers for the SPACE Dealer Board are Frank Abruzzo, Chairman; Jerry Fischette, Vice Chairman; Ed Reynolds, Treasurer and Dan Weggeland, Secretary.



**Statement of**
**The Honorable Timothy E. Wirth**
**U.S. House of Representatives**

**Before the Satellite Television Industry Association Presented on The Mall, Washington, D.C.**

**October 29, 1985**
**Satellite Earth Day**

Thank you. I appreciate the opportunity to be a part of this historic occasion. From the looks of things, there certainly won't be a shortage of "dishes" for this huge cake before us which signifies the 1 year anniversary of legislation which formally legalized this industry.

It is truly heartening to see the tremendous progress that this important consumer industry has made in such a short time. Amazingly, satellite dishes was signed into law just one year ago. All of you here today are living proof that this is one piece of legislation that has thus far been very successful, indeed.

I am pleased to be joined here today by two Subcommittee members who have championed the rights of the satellite dish industry—Billy Tauzin and Tom Tauke.

From my first days in Congress I have worked for the development of new communications technologies so that the American public—including those in rural areas—could have the best possible access to the electronic information age. The TVRO (television receive only) industry is a living, breathing example of how the introduction of new communications technology can very quickly bring substantial benefits to the consumer. Thanks in large part to this industry, many citizens are rapidly gaining access to a wide range of exciting and diverse programming choices to which they previously did not have access.

I have consistently stated that there are two fundamental communications policy objectives which must be addressed before all others. The first is to promote and encourage competition in the marketplace. The second is to provide the American public with widest possible diversity of programming outlets. The backyard dish industry epitomizes both goals. It has created a new dimension of strong, independent programming outlets available to all Americans, including those in rural areas often left unserved by other communications technologies.

Yet, if the backyard dish is to realize its full potential, dish owners must have access to a wide variety of programming. I am pleased to see that many programmers have recognized the importance of this industry and are beginning to direct their efforts toward marketing to this new market.

At the same time, we must recognize that programmers have a legitimate right to protect their property. Failure to take into consideration the legitimate interest of programmers in being paid for their services could lead to a loss of quality programming for all of us, and an undermining of diversity.

While you have a lot to celebrate given the tremendous strides your industry made last year in being brought legally within of the Communications Act, there are some public policy issues which remain to be thought through. For instance, consumers could conceivably be quite disserved by a proliferation of incompatible decoder boxes that are only capable of unscrambling certain signals. There are other issues that have been raised as well. I know that you are all here today in an effect to see that Congress will take another look at the issues surrounding the scrambling of satellite programming signals. I am sure that you will all be pleased t know that after consultations with Congressmen Tauzin and Tauke, I have decided to hold hearings early next year on the scrambling issue. After we have a full year of experience under the new Act, I think we will be in a position to better evaluate how well we are achieving the goals the legislation set out to meet. I look forward to hearing the concerns of satellite dish owners when we hold these hearings early next year.

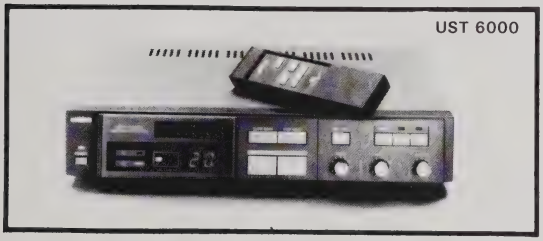
All of you here today—many of whom traveled hundreds of miles to join in this celebration—have reason to be proud. You are the essence of the telecommunications revolution—a true symbol of the benefits of technological diversity. I want to thank you and SPACE for your tenacious work in promoting this important consumer technology which I understand is almost two million dishes strong and growing stronger by the day.

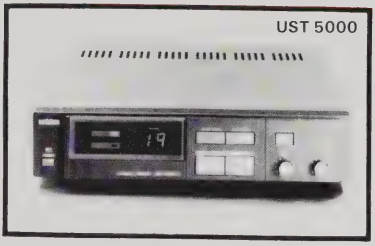
Thank you for asking me to be with you today to celebrate our great legislative victory last year. I am honored to have played a role in the development of this industry and am eager to continue working with you.

# SERVICE

## Our name guarantees it

Satellite Video Services™

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**Satellite Video Services RI, Inc.**

## The Northeast's Leading Distributor

☐ YES Please send me more information on Satellite Video Services and your complete line of satellite receiving equipment and accessories.

Name:_____ Company Name:_____

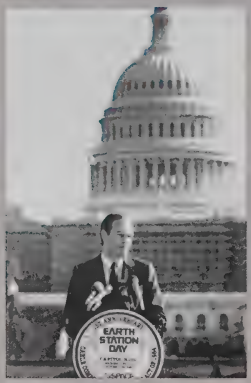
Address:_____ Phone Number: (  )_____

☐ Established Dealer ☐ I want to become a Satellite Video Services Dealer

SV-12/85

# Satellite Earth Station Day Remembered!

## October 29, 1985




Cong. Tom Tauke in front of the Capitol dome.

Pat Porter quiets the crowd before the Monday night briefing.

Senator Goldwater meets with Rick Brown and Derrick Humphries in the Rayburn Bldg.

Chairman Taylor Howard shares a joke with Senator Goldwater, Rick Brown and Derrick Humphries.

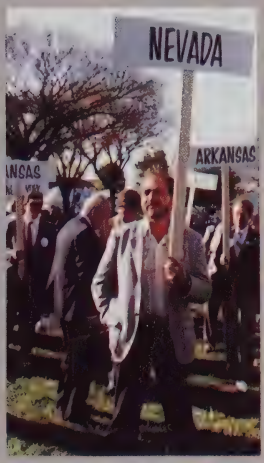
A strong showing of support (l. to r.) Cong. Charlie Rose, Cong. Tim Wirth, Cong. Tom Tauke, Cong. Billy Tauzin and Chairman Taylor Howard.

Cong. Tim Wirth receives a plaque from SPACE.

Chuck Hewitt talks with Cong. Billy Tauzin before his speech.

Earth stations take over the East Capitol Grounds.

Cong. Tim Wirth updates the press on legislative issues.




A Nevada constituent stands out in the crowd.

Taylor Howard, Chuck Hewitt and Rick Brown brief attendees on ESD's events.

STV publisher Chris Schulteiss interviews Senator Goldwater during live TV coverage (Derrick Humphries also present).

Dish antennas focused in direction of Capitol dome.

Congressmen join together in cutting the birthday cake.

# INTRODUCING THE $279 BOMBSHELL.

We'll speak softly about the UST-2000.

Because at a suggested retail price of $279, this state-of-the-art satellite receiver will make its own noise in the marketplace.

Put simply, the UST-2000 offers more value for less money than any satellite receiver ever made. At a breakthrough price, it gives you:

Performance. Up to the standards that have made Uniden the No. 1 name in satellite receivers. Clear picture, clean sound. Reliable, durable, built to last.

Styling. A high-tech look that shares design elements with our higher priced models. A quality, expensive look and feel simply not found in most other low cost receivers.

Microprocessor-driven controls. A first for a unit in this price range. Permits soft-touch pushbuttons for channel selection, channel scan and polarity selection. Thoughtfully placed audio, video fine tune and skew controls. Plus a large, easy-to-read LED channel display and convenient polarity indicators.

Composite video output jack. Makes it decoder ready.

The UST-2000 is designed to mate perfectly with either our basic antenna controller, the UST-710, or our programmable UST-730. They're part of a complete line of Uniden TVRO products including block downconversion receivers and system components.

For more details about the new UST-2000 ask your Uniden distributor or call 317-841-6340 (in Canada 1-800-663-0296). This is one bombshell your customers won't want to miss.

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Win with Uniden in '85.

PIONEER MEMBER OF SPACE

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# Legal News

## Testimony of SPACE Chairman Taylor Howard Before the Subcommittee on Cable Television of the California State Senate

October 11, 1985
Palm Springs, California

Mr. Chairman, members of the Subcommittee, I am Chairman of the Board of Directors of SPACE, The Satellite Television Industry Association. SPACE is the trade association representing the owners (consumers), distributors and manufacturers of satellite earth stations. Our membership includes individual owners of satellite earth stations, as well as small mom and pop operations and large New York Stock Exchange companies that produce, distribute or sell earth station equipment. Our membership comes from all the 50 states and from several foreign countries.

SPACE welcomes the opportunity to participate in these hearings and to comment upon the growth and future of the home satellite earth station industry and the consumer benefits it provides.

This industry, in six short years, has evolved from individual hobbyists and entrepreneurs tinkering with chicken wire in their backyards and attics, into a $2 billion-a-year, largely American business. It has become a major factor in the information and entertainment distribution marketplace and an important provider of jobs, particularly in the state of California.

Today nearly 1.7 million homes are equipped with their own home satellite antennas. In California alone, about one-quarter of a million people already receive their television by means of a home satellite dish. Over 1,500 home satellite earth station retail outlets exist in California. Scores of manufacturing companies serving this market from Redding to San Diego are employing many thousands of people. If there is a home state for our industry, I am happy to say that it is California. Let me just mention a few of our SPACE members who are headquartered in this state and are leaders of our industry.

- Amplica (A division of Comsat)
  Newbury Park, California
- Avantek, Inc.
  Milpitas, California
- California Amplifier, Inc.
  Newbury Park, California
- Chaparral Communications, Inc.
  San Jose, California
- Janeil Corporation
  Reseda, California
- KLM Electronics
  Morgan Hill, California
- Paradigm Manufacturing, Inc.
  Redding, California
- Satellite TV Week
  Fortuna, California
- Toki
  Woodland Hills, California
- Uniden Corporation
  Huntington Beach, California
- Satellite Business
  Palm Springs, California

To assist the Subcommittee in its hearings, I will speak briefly about the evolution of the video transmission marketplace to see where we are coming from and where we are going.

### Broadcasting

The advent of commercial television in the late 1940s produced much excitement and promise. In the few major cities that had television stations, the lucky individuals who owned television receivers were the center of neighborhood attention. People dropped by to view pictures that somehow magically appeared in one's living room. In some cities, there were eventually two or three channels, and as the 1950s progressed, some major cities obtained more and more television. Television also came into smaller markets, so that by the end of the decade most metropolitan areas had some amount of television. Much of California and the rest of the country, however, did not.

The broadcasting system depended on advertising—both national and local—and thus, on obtaining a large number of viewers. Of economic necessity, the broadcasting system focused on serving the large population centers. Concern was always expressed for the rest of America. There were all kinds of plans: to have a few major stations with wide broadcasting areas; to have transmitters on airplanes to cover wide areas; and to have a widespread UHF television service. The latest has been the plan for low power television, to bring additional service, particularly to rural areas.

As we look at the present facts of life, after almost 40 years of television, the Communications Act goal of making "available, so far as possible, to all the people . . . an efficient, nationwide . . . service" is not a reality. If you do not live in a major population center, you are shortchanged. The smaller the community, generally

speaking, the less you have. And if you live outside of major population areas, you may have little or nothing. In some areas of California, a television viewer can receive the signals of well over fifteen channels off-the-air; in some areas, none.

## Cable Television

Almost simultaneously with the development of over-the-air broadcasting, came the development of cable television—ever expanding its capacity from one to three to five, twelve, thirty and now over 50 channels. In 35 years, for a variety of reasons including excessive regulation, progress has been slow. There are approximately 36 million cable television subscribers today. Most of the newer cable subscribers are obtaining, via satellite, a wide variety of programming, much of which has not been available before.

## The Likely Future

No one predicts major growth in the number of conventional over-the-air television stations. Low power television, multipoint distribution service (MDS) and subscription television (STV) do not offer the same viewing opportunities as the multichannel capability of cable. The history of MDS and STV replicates that of broadcasting and cable. They thrive on dense populations. Will cable be the answer?

Large segments of California will never have cable. Cable started and enjoyed most of its early prominence largely in smaller towns, but drive a sort distance outside these towns and there will be no cable. Cable loves population density and abhors distances. Where there are less than thirty dwellings per mile, there often is little cable—and probably never will be. It simply is not economical to supply such areas.

There appears little hope for improvement in television viewing opportunities for large segments of our population. Rural Californians may continue to be treated as second class citizens as far as communications is concerned.

## Another Possibility

There is a real possibility for a different kind of future for Californians who cannot obtain cable—one in which all of the following could be on par with other Americans in obtaining the best that television has to offer:

A rancher outside of Likely;
A dweller in the mountainous regions of the Sierra Nevadas;
A movie industry worker in the Hollywood hills;
A fisherman or vacationer living on Santa Catalina;
Children in a country school near Palo Verde;
An apartment house in a city where cable has not come;
Residents too far outside of the city limits for cable to have extended its lines.

Imagine one possibility that all of these Californians could view programming delivered directly by satellite—the same channels now available on cable systems. Imagine Americans now having no television, or access to only one, two or three network stations, having access to:

- 24-hours a day news;
- Coverage of the U.S. Congress;
- Independent television stations from Los Angeles, Atlanta, Chicago and New York City;
- Religious stations;
- Children's channels;
- Women's programming;
- Minority programming—for blacks and Hispanics;
- 24-hours a day sports;
- Other sports channels;
- 24-hours a day feature films;
- Call in and other programming beamed exclusively to home satellite antenna owners;
- Cultural channels.

Imagine no longer being constrained to the choice of services selected by someone else. Imagine being able to install in one's backyard a satellite antenna so that all satellite channels could be viewed in the privacy of one's own home. Thanks to deregulation and marketplace economics, this dream is coming true.

Ten years ago, a satellite earth station installation cost $100,000. The Federal Communications Commission had a rule requiring, in effect, ten meter diameter dishes. Total costs for an installation were $100,000 to $250,000. Eight years ago, the FCC changed its rule and five meter earth stations became available and more widely used by industry as prices tumbled to $25,000 for a typical earth station installation. Things rapidly began to change in the late 1970s as the home market started. Today it is possible to buy a six-foot, fixed-position satellite receiving system which will produce good pictures on Galaxy 1 for well under one thousand dollars. Consumer prices for satellite antennas that tune all domestic satellites, range from $1,000 to $5,000. Mid-price units today produce better quality pictures than the best available ten years ago. For the first time, rural Americans can have access to the same, or more, sources of information and entertainment than city or suburban dwellers. But, sad to say, it is early enough to stifle technology and keep a large part of the television viewing public as second class citizens.

## Satellite Television—Growth in Spite of Adversity

From the birth of this industry, only six years ago to the present, there have been those who wished it did not exist. For the first five years our competitors called us "pirates." They tried to stop the growth of this industry. Despite the fact that earth stations were used to view satellite services which welcomed viewing by dish owners, as well as services which did not, threatening letters were sent to manufacturers, dealers and owners of the equipment. Many earth station owners sent checks to those services which they watched only to have those checks returned with letters warning that watching their television

channel was against the law. A major cable television company went so far as to sue a retailer of home earth stations alleging that the sale and use of this equipment violated state and federal law. However, a federal district court judge found on all counts for the home satellite antenna retailer in *Air-Capital Cablevision, Inc. v. Starlink Communications Group*, 601 F. Supp. 1568 (D. an. 1985).

There were four legislative efforts in the United States Congress from 1979 to 1984 which, if successful, would have put the satellite earth station industry out of business. On each occasion rural Americans, along with others concerned with the expansion of technology and service in a competitive marketplace, rallied to the home earth station industry's cry and defeated these legislative initiatives.

Finally, in 1984, the legality of home earth stations was clarified by the United States Congress. Through the satellite viewing rights provisions contained in section 705 of the Cable Communications Policy Act, it was made clear that the manufacture, sale and use of home satellite earth stations and the viewing of unscrambled satellite programming was legal. Compensation to programmers was assured, provided they either encrypted their service or engaged in a marketing plan for unscrambled services which resulted from fair and open marketplace negotiations. At the same time, substantial additional penalties were provided for the theft of cable television service, as well as the commercial violations of Section 705 of the Communications Act.

From the very beginning of this industry's existence, up to the present time, the home satellite earth station industry's position has been consistent. Again, SPACE does not oppose the efforts of satellite programmers to encrypt their programming in order that they may receive fair compensation for it. SPACE does not oppose the concept of payment of a fair fee for services provided. (In this regard, it should be noted that SPACE has taken a position different from the cable television industry, which fought for many years the efforts of the broadcasters to obtain copyright compensation.) Our full position in these issues is set forth in a resolution of our Board of Directors attached as Exhibit A.

Some satellite services, principally those which depend for their revenue upon payment of a direct fee, have announced that they intend to encrypt their signals in the near future. While we have all heard this many times before, going back to 1980, as yet, none of the major satellite services are scrambled on a full-time basis. Nevertheless, it does appear that some services, at some time in the future, will be scrambled. SPACE is sensitive to the legitimate concerns of the subscription programming services that must be paid a fee for the viewing of their services.

## Anti-Competitive Motivations

However, there are other concerns of the programming industry which are not worthy of concern, let alone protection. We have seen great pressures being brought upon the satellite programming industry by the nation's largest and smallest cable television companies not to do busines with those industries which are competitive to the franchised cable (SMATV) television business. Several years ago, the Arizona State Attorney General brought an antitrust suit on this issue which was ultimately settled so that the satellite services were required to do business on a fair and equitable basis with private cable operators in that state. The problem is not over, however. Franchised cable operators are attempting to coerce all satellite services into scrambling, some of which have little or no incentive to do so. The United States Department of Justice has announced that it has initiated a formal investigation into the policies of the satellite services and cable operators with respect to scrambling.

While most of the major subscription theatrical motion picture services have announced an intention to scramble, with rare exceptions, neither the exact time nor the equipment to be used is certain. A major cable operator, TCI, announced that it planned to provide a scrambled programming offering to dish owners. The National Cable Television Association has announced the formation of a consortium whereby cable operators could sell to dish owners scrambled services. That consortium is now choosing among a dozen different technologies to use for scrambling. Several satellite programming companies, fearing the power of the cable television industry, have announced their own plans to form a consortium to market to dish owners. Two bills have entered into Congress, each with over 30 co-sponsors. These bills are H.R. 1769, which would postpone scrambling for two years until the marketplace has had a chance to deal with the difficult concepts that scrambling entails and H.R. 1840 hat will require fair dealing in the event services are scrambled. A companion bill, S. 1618, has recently been introduced in the Senate with bipartisan support. In short, while some services will be scrambled at some time in the future, it is unclear which technologies will be used, when that scrambling will actually occur, and which services will actually do it.

Very significant economic incentives are there to ensure that whenever, and whatever, future services are scrambled, home earth stations will be able to receive the scrambled services. Scrambling of satellite signals will be performed to ensure payment for services, not to deny access. Virtually every major satellite cable programmer that has stated an intention to scramble has also stated that it tends to serve the home earth station consumer. That objective will not be lost when deciding on which technology to use. A strong economic incentive exists to capture existing owners of antennas as well as new purchasers of equipment.

Our industry has been studying the scrambling issue for three years. When Home Box Office announced that it had chosen M/A-Com equipment for scrambling, our industry

# Dedicated To Serving Its Membership

SPACE is coming of age! Now more than ever your association is ready to meet the needs of its members. We have taken a hard look at our membership programs listened very carefully to our members. As a result, SPACE expanded its programs to include:

- **Educational Program and Dealer Certification Courses**

  Through this program, a dealer can gain expertise in all areas of earth station installation and operation. The program is designed to increase the number of qualified dealers, enabling those dealers to advertise their expertise, thereby aiding consumers.

- **Standards Program**

  A committee comprised of industry experts will develop performance testing and measurement standards for earth station components which will help dealers in identifying performance levels of equipment of various manufacturers.

- **Statistics Program**

  This program has been developed to collect, aggregate and publish data on the earth station industry. This information will help members and industry representatives in their marketing and financial efforts.

- **Legislative and Legal Council**

  As always, SPACE attorneys stand ready to assist our members with legal problems. The Cable Telecommunications Act, which contains satellite viewing rights language, was recently signed into law by President Reagan. The Act reaffirms the legal right to manufacture, distribute and sell satellite earth stations, and the legal right of home owners to view unscrambled satellite delivered programming on their earth stations. The passage of this legislation is a milestone for the industry and wipes away the "pirate" image that has always confronted it. However, not all of the problems have been solved, and issues such as local zoning problems or how satellite delivered programming will be distributed are issues that continue to inhibit the growth of this industry, and are industry battles still to be fought.

- **Zoning Regulations**

  Zoning issues in all states will be monitored by a newly created task force. A data base describing zoning activities in each state is being established in order to provide immediate and up-to-date information and advice to dealers facing zoning problems. Additionally, a new publication on zoning issues which will supplement "The Satellite Earth Station Zoning Book" is being prepared to offer information and assistance to zoning boards in preparing ordinances on earth stations.

***Your membership funds help to support these programs. Help your industry grow in these and many more important areas.**

**Please check which membership category you are joining under:**

| | CATEGORY | DUES |
|---|---|---|
| _____ | **PIONEER** | **$500.00 a month** |

SPACE Pioneers are those members who are primarily involved as a manufacturer, distributor or as a dealer in the satellite earth station industry. These members are recognized as the most powerful elements in the association, and they receive benefits such as early exhibitor mailings prior to trade show sign up and industry recognition.

_____ **AFFILIATE PIONEER** **$300.00 a month**

Affiliate Pioneers are suppliers, publishers, vendors, etc. who wish to participate fully in SPACE but do not fulfill the criteria for SPACE's primary membership category, Pioneers. This membership allows for full recognition and participation, with the exception of voting privileges and Board participation.

**PRIVATE CABLE** **$750.00 a year**

_____ This membership category includes private cable operators or owners of private cable systems.

_____ **DISTRIBUTOR** **$500.00 a year**

This membership category includes distributors of satellite earth station equipment.

_____ **AFFILIATE COMPANY** **$500.00 a year**

This membership category allows participation in the association by manufacturers, publishers, suppliers and general supporters who are not inclined to belong at the Pioneer level. This category provides a medium through which they can support their industry, with the exception of voting privileges and Board participation.

_____ **DEALER** **$95.00 a year**

This membership category includes dealers of satellite earth station equipment.

_____ **CONSUMER** **$35.00 a year**

Consumers are owners of backyard earth stations who wish to support the aims of SPACE,or any individual who wants to support SPACE through a yearly contribution.

To join SPACE, please complete the following application and mail with payment to SPACE, 300 N. Washington St. Suite 310, Alexandria, VA 22314.

Company _____

Street _____

City _____ State _____ Zip _____

Contact _____

Phone _____

Choice of Payment (Circle One)

Visa / MasterCard / Amex Card No. _____ Exp. Date _____

☐ Check ☐ Cash Signature _____

Annual Dues for any section of SPACE includes a subscription to **SATVISION** ($30 per year or $2.50 monthly, to members only), a certificate of membership and enrollment. Annual dues for any section of SPACE also includes a subscription to **Inside SPACE** ($20 per year or $2 monthly to Pioneer, Afiliate Pioneer, Private Cable, Distributor, Affiliate Company and Dealer Members only).

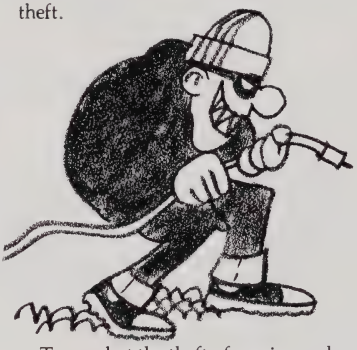
representatives met extensively with both companies to discuss the issue of service to existing consumers. It became absolutely certain that both companies wanted to serve the existing customer base. M/A-Com issued specifications concerning what is needed to interface with M/A-Com decoders. What is required is simply unclamped and unfiltered video. As Chairman of SPACE, and as a manufacturer of a necessary item of equipment that interfaces with all earth station equipment, I routinely examine all receivers that enter our marketplace. I know of no receiver being manufactured today that is incompatible with the elementary requirement of unclamped, unfiltered video. Many receiver manufacturers are providing outpull jacks for decoders. Other receivers can be modified easily by home earth station retailers to provide a connection to the unclamped, unfiltered video output of the receiver.

Furthermore, extensive testing has taken place of virtually all receivers manufactured to date. As reported in *Coop's Satellite Digest* of April 1, and April 15, 1985, no receiver was found that was incompatible with the M/A-Com decoder.

In summary, there is no question in my mind, that virtually all existing earth station receivers are compatible with decoding equipment soon to be marketed and other equipment that will be developed in the future. Fortunately, achieving the decoder/receiver interface is a simple process.

## Scrambling and Theft of Service

The franchised cable television industry has had a serious problem with the theft of its service. Scrambling of satellite signals, as we have heard it described, will do little to resolve that problem. But it could. Cable's theft of service problem has come not from home satellite antennas but from those who are actually receiving the cable service from the cable company's lines without paying for it. Nationally, some ten to twenty percent of potential cable subscribers are receiving at least part of their service without paying for it. This is some 3.6-7.2 million homes. Theft of service has resulted from a variety of factors: the use of poor security which enables customers to use converters to view programming provided on "mid-band" channels; poor inventory control over descramblers and converters; faulty billing practices by the cable operator; and, dishonest cable installers who provide equipment to individuals for a one-time payment which does not appear in the cable operator's books. Scrambling of the satellite feed to the cable headend, will not impact this theft.



To combat the theft of service problems encountered by the cable industry, Congress saw fit just last year to increase penalties for cable television piracy while clarifying the legality of home earth stations. Because that law has only been in effect for less than a year, it is unclear that these penalties are effective in deterring theft of service and whether, in fact, additional efforts will be required. In any case, SPACE does not oppose new federal or state legislation specifically targeted to this area. We have a suggestion. The same kind of scrambling that is advocated for earth stations can be made available to combat theft of cable service. Instead of decoding at the cable headend, the decoding could be accomplished at the cable subscriber's home—just as it can be done at the earth station customer's home. That is, the decoding device could be placed in the home instead of the cable headend. This would end theft of service once and for all. And because of the great number of cable subscribers, it would bring the manufacturing cost of decoders down to a reasonable price in a short period of time. We suggest that the legislature consider the mandatory conversion of the state's cable subscribers to addressable decoding direct from the satellite. This will reduce theft of service and increase significantly tax revenues now being lost.

## Additional Suggestions

To the extent that the Subcommittee wishes to investigate issues and consider legislation in this area, we suggest the following:

- The pattern and practice of the franchised cable industry to place pressure upon satellite services not to do business with potential competitors to the cable industry and the appropriateness of these under California's antitrust laws.
- The role of home earth stations in bringing service to rural areas of California where cable will not go.
- The technological obsolescence of many cable systems which cannot provide subscribers anything close to the dozens of satellite services currently available.
- The disincentive of cable operators to reconstruct their systems, absent effective competition, and the role of home satellite antennas in providing competition which will act as a regulator of rates, terms and services for cable television, particularly now that rate regulatory authority has been removed from the vast majority of cities.
- And most importantly, to protect consumers, legislation ensuring that sales of decoders and the programming for home earth stations not be funnelled through cable operators exclusively. While cable is welcome to participate in the earth station industry, the consumers of California would benefit most by open competition.

# Legal News

The motivation behind some critics of the home earth station industry is the fear of competition. That fear is as unjustified as it is oft-stated. The growth of television was feared by both the motion picture companies, as well as radio broadcasters. Yet television did not put either of these other businesses out of business. The growth of cable television was feared by television companies. Yet the cable television growth has not harmed the television broadcasting industry. Home earth station growth will not harm the interests of the cable industry—where the cable industry is doing its job. Instead, home earth stations, like cable a decade ago, are bringing much-needed viewing choices to unserved and underserved areas. In the process, they are providing healthy competition to franchised cable which benefits the consumer.

**Exhibit A**

## SPACE'S GOALS REAFFIRMED BY BOARD OF DIRECTORS

Nashville, Tennessee, September 1, 1985—In a reaffirmation of SPACE's goals, the Board of Directors ratified the following set of goals:

First, the satellite earth station consumer should have a right of access to all scrambled signals.

Second, programmers generally should be paid for their efforts, either through advertising, through subscription, through pay-per-view or some yet-to-be-conceived payment plan.

Third, the satellite earth station consumer should pay reasonable prices. This must come about either through a) a competitive, free enterprise distribution system not controlled exclusively by programmers or cable operators or by, b) legislation including regulation. SPACE supports a level playing field in the area of distribution of scrambled signals to satellite earth station owners both inside and outside of cabled areas. That is, we oppose any distribution scheme that would have the effect of excluding independent, non-cable or non-programmers (distributors), and we oppose exclusive distribution plans through the cable industry or programmer cooperatives.

Fourth, SPACE supports the entrepreneurial spirit of all advertiser-supported services that wish to serve the rapidly expanding earth station market in an unscrambled mode in order to maximize their viewing audiences.

We encourage these services to use their common sense and not succumb to the anticompetitive posture of the cable industry advocates that are attempting to force them to scramble by threatening to drop their services. In summary, they should have freedom by choice.

Fifth, scrambling equipment should be low cost, user friendly and widely available. This includes: a) chip sets and associated electronics should be available to all satellite earth station receiver manufacturers; b) sufficient decoders should be available before encryption commences, and c) encryption should be a flow-through encryption system that will allow viewing screens to be addressed, decoded and billed. This includes every cable, MDS and STV subscriber. Anything short of that is an interim technology and the consumer should not be forced to pay for such an experiment.

# Education News

## U.S. and Soviet Youth Readied for Space Bridge

by Sharon Bittner

Students throughout the U.S. and Canada will have the unique opportunity to view a live dialogue and exchange of international information between young people in the United States and the Soviet Union, via their satellite dish antennas at their schools.

Discussions involving the works of Tolstoy and Chekov in English classes, the cultural background of the Soviet people in social studies classrooms, and Student Councils planning for satellite viewing by the entire student body are projects that are in preparation for the early January, 1986, "space bridge" program.

The teleconference follows long months of preparation between Soviet and U.S. pre-production negotiators who discussed ways of presenting an engaging and informative program. Selection of 6-8 youths between the ages of 16 and 22 as the primary participants in the program was also completed. Meetings were held in each country with the key participants, teachers, staff and others determining the specifications for the "space bridge." Videotapes, recording the sessions, were exchanged between the two countries.

During the actual teleconference, questions will be posed by the young people to their counterparts, covering such diverse activities as the lives of young people in school, in the family and during their leisure hours. Issues such as the role of technology in education and individual lifestyles will be explored. One segment will feature films prepared especially by the two groups, addressed to their peers in each country. Another portion will focus on the role of music and dance in the lives of young people.

Edited versions of the satellite conference will be aired nationally in both countries in early 1986. Titled "Glory Days: a Week in the Life of U.S. and Soviet Youth," the PBS program will precede an extensive educational outreach project planned for spring, 1986.

"Glory Days" is the second in a series of space bridge events, a joint endeavor of the University of California at San Diego and the Roosevelt Center for American Policy Studies in collaboration with Soviet State Television. With the aim of utilizing new technologies to establish substantive dialogue between groups of people in the U.S. and the Soviet Union, the project seeks transmission of new information and insights for viewers and participants.

The first simulcast, "Remembering War," aired May 7, 1985, on the occasion of the fortieth anniversary of VE Day. Veterans, historians, writers, and others took part in the dialogue. Wartime film footage never before telecast on national television was assembled by both sides. The two-hour live space bridge was a moving and compelling interchange for all involved.

Soviet television aired a one-and-a-half hour version of "Remembering War" on national television on June 20. The U.S. edit is available in many locations from public television stations. An interesting sidelight has been the realization in Soviet countries that their history books have neglected to include mention of the western allies' part in the defeat of Nazi Germany. Thus, increased mutual understanding between U.S. and Soviet citizens has already been achieved by the ambitious space bridges project.

A not-for-profit agency called Classroom Earth is coordinating the downlink to the various schools which will view the first live video bridge between U.S. and Soviet youth. This voluntary association of schools with dish antennas in the U.S. and Canada boasts 235 downlinks, providing an education on a global basis via satellite television. Classroom Earth is based in Spring Valley, Illinois, with ties to Western Illinois University in Macomb, Illinois.

Classroom Earth Executive Director, Walter Westrum, who is also superintendent at Hall Township High School in Spring Valley, is enthusiastic about the space bridge project. "If we can have sister schools in our country, why not some in the Soviet Union? Our primary objective is to get kids involved. Satellite education is really magic. We need to create the magic for our students, develop pride in our schools, and let these youngsters know that anyone can do it."

A videotape of life at Hall High School, narrated by two of its students, has been prepared at the request of the "Glory Days" producers. Westrum hopes that portions will be included in the telecast footage.

Classroom Earth has prestigious company in its involvement with the space bridge project. The Carnegie Corporation, Richard Lounsbery Foundation, Armand Hammer Foun-

dation, W. Alton Jones Foundation, Benton Foundation, Science Foundations International Corporation, Ford Foundation, KPBS-TV in San Diego, and WTTV/Channel 11 in Chicago have provided assistance, contributions, and funding in various amounts.

At present, the exact satellites and transponders to be used in the global teleconference have not been confirmed. Classroom Earth will send final information to schools and cooperating dealers. A general announcement will be forthcoming immediately upon the final decision.

The public and satellite earth station dealers are being encouraged to inquire into the interest of local schools in viewing the simulcast and later participation in follow-up educational opportunities. Loans of equipment could be arranged, thus allowing schools everywhere to have a front row seat during a timely effort to promote better understanding between the Soviet people and citizens of the United States.

For additional information contact Classroom Earth, Spring Valley, IL 61362. Content information may be obtained from the University of California-San Diego at 619/452-4410.

# Additional SPACE Dealer Certification Program Graduates

Following is a listing of dealers who have graduated from the SPACE Dealer Certification Program. Like their predecessors in the Program, these dealers have actively demonstrated to the consumer their commitment, in both time and dollars, to provide their customers with quality service.

L. E. (Bud) Ashwill
Sunrise Satellite
12300 W. 62nd Terrace
Shawnee, KS 66216

Kenneth Clymer
Kenny's Satellite Sales
1530 S. Q
Elwood, IN 46036

Ronnie Goss
Ronnie Goss T.V.
814 Pickering Avenue
Mena, AK 71953

I. R. "Butch" Halfpap
Halfpap Satellite Linker
2309 N. Fairfield Road
Beavencreek, OH 45385

Frank H. Heinz
Dial One H&H Electrical Sys.
130 E. Main Street
New Albany, IN 47150

Robert P. Heinz
Dial One H&H Electrical Sys.
130 E. Main Street
New Albany, IN 47150

Matthew Jenkins
Space Link
13300 Brandywine Road
Brandywine, MD 20613

Gary S. Lynch
Lynch Sales
Box 232
Yuma, CO 80759

Thomas F. Muehlberger
Starlight Satellite Systems
506 E. 4th Street
Duluth, MN 55805

Michael E. Myhre
New Dimension Satellite TV
1006 10th Drive, S.E.
Austin, MN 55912

Diana Phelps
Phelps Satellite Systems
4020 W. Johnson Road
Ludington, MI 49431

Jo-Jo Philliber
Satellite Specialties
Box 2823
Lafayette, LA 70502

Grant Pratt
West Coast Sound
4830 Pan American
Albuquerque, NM 87109

Robert J. Reichert
Starlight Satellite Systems
506 East Fourth Street
Duluth, MN 55805

John R. Sparkman
Contract Electronics Service
P.O. Box 1061
Mineral Wells, TX 76067

Toby R. Tedford
TEDCO Satellite Antennas
1113 Fort Worth Street
Weatherford, TX 76086

# Publications Covering The Earth Station and Private Cable Market

The following publications and programs cover various aspects of the earth station industry and may also be of interest to SPACE members:

**Birdseye**
**SRS, Inc.**
145 N. Columbus Rd.
Athens, OH 45701
(614) 594-2524

**Boresight News**
Piscataway Corp. Center
Piscataway, NJ 08854
Shaun Kenny
(201) 562-0087
Thursday 9:00 p.m.
Satcom 4 Tr. 20

**Cable Vision**
Inter. Thompson Comm. Inc.
600 Grant St.
Suite 600
Denver, CO 80203
Victoria Gits
(303) 860-0111

**Channels Magazine**
19 West 44th St.
New York, NY 10036
Richard Barbieri

**Channel Guide**
7340 E. Caley Ave.
Suite 380
Englewood, CO 80111
Lloyd Covens
(303) 779-7930

**Dealerscope**
401 N. Broad St.
Philadelphia, PA 19108
Neil Spann
(215) 238-5300

**Home Satellite Marketing**
CES Publications
345 Park Ave., South
New York, NY 10010
Jeffrey Zink
(212) 686-7744

**Home Satellite Newsletter**
First Communications Group
1730 Lynn Street
Arlington, VA 22209
Vans Stevenson

**Multichannel News**
Fairchild Publications
P.O. Box 1124
Dover, NJ 07801
(303) 393-6397

**Phillips Publishing Co.**
publisher of:
Satellite News, DBS News
and other publications covering
the satellite industry
7811 Montrose Rd.
Potomac, MD 20854
dAve Williams
(301) 340-2100

**Pre Vue Publications**
Valerie Hansen
Box 31225
Billings, MT 59107
(406) 259-9067

**Satellite Business**
**Satellite Product News**
**1985 Satellite Directory and**
**Buyer's Guide**
**1985 Directory of Satellite Dealers**
**Video Product News**
P.O. Box 2772
Palm Springs, CA 92263
Steve Tolin
(619) 323-2000

**Satellite Communications**
Cardiff Publishing Company
6430 S. Yosemite St.
Englewood, CO 80111
(303) 694-1522

**Satellite Dish Magazine**
P.O. Box 8
Memphis, TN 32101
Paul Landaker
(901) 521-9000

**Satellite Orbit Magazine**
**Satellite Orbit International**
**Satellite Dealer**
**VideoSat News**
**Sat-Guide**
Commtek Publishing Co.
9440 Fairview Ave.
Boise, ID 83707
David Wolford
(800) 327-2100

**Satellite Television Newsletter**
7397 Afton Rd.
Woodbury, MN 55125-1501
(612) 738-2165

**Satellite Today**
P.O. Box 41591
Phoenix, AZ 85080
Karen Saylor
(602) 581-0188

**Satellite TV Opportunities**
**Magazine**
305 W. Jackson Ave.
Oxford, MS 38655
Dr. Ed Meek
(601) 236-5510

**Coops Satellite Digest**
**STV Magazine**
**OnSat Magazine**
Triple D
Shelby, NC 28150
Chris Schultheiss
(704) 482-9673

**Satellite TV Week**
Fortuna Communications Corp.
P.O. Box 308
Fortuna, CA 95540
Patrick O'Dell
(800) 358-9997

**Satellite Week**
Television Digest, Inc.
1836 Jefferson Place, N.W.
Washington, DC 20036
Jonathan Hiller
(202) 872-9200

**TVRO Technology**
Wiesner Publishing Co.
5951 S. Middlefield Rd.
Suite 204
Littleton, CO 80123
Blair Gilbert
(303) 798-1274

**Video Store**
Hester Communications, Inc.
1700 E. Dyer Rd., Suite 250
Santa Ana, CA 92705
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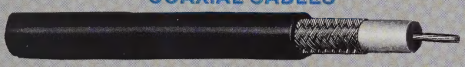

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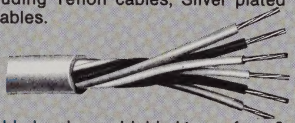

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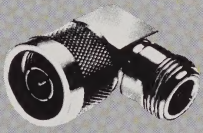

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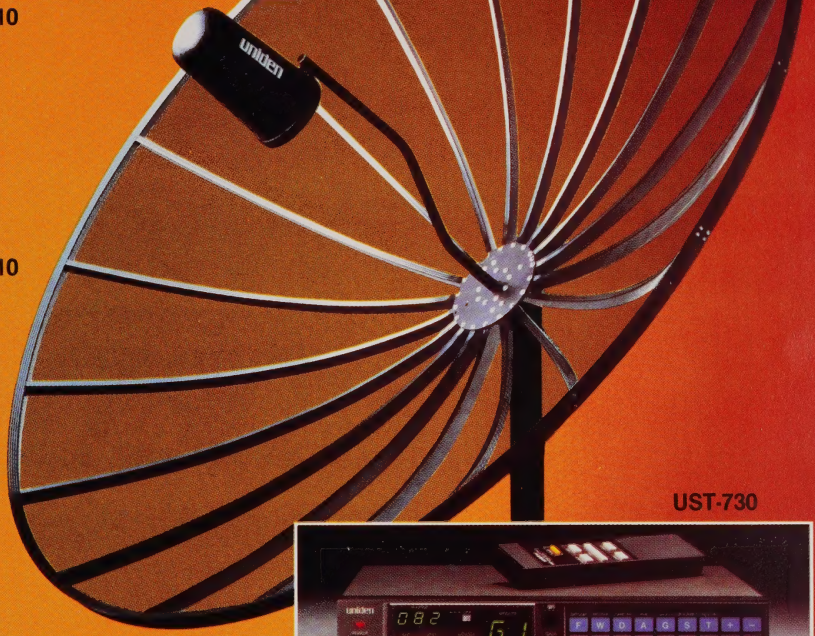


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